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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/196,689

11/20/1998

MANISH KULKARNI

36J.P159

9437

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7590

05/26/2004

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

POKRZYWA, JOSEPH R

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 05/26/2004

24

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/196,689

Applicant(s)

KULKARNI, MANISH

Examiner

Joseph R. Pokrzywa

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.
- NOTE: \_\_\_\_\_.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: none.

Claim(s) objected to: none.

Claim(s) rejected: 1-35.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Period for Reply***

1. The period for reply continues to run 3 MONTHS from the date of the final rejection. Any extension of time must be obtained by filing a petition under 37 CFR 1.136(a) accompanied by the appropriate fee. The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. A reply within the meaning of 37 CFR 1.113 or a request for a continued examination (RCE) in compliance with 37 CFR 1.114 must be timely filed to avoid abandonment of this application.

### ***Response to Amendment***

2. The amendment filed 5/3/04 under 37 CFR 1.116 in reply to the final rejection will be entered upon the filing of an appeal, but is not deemed to place the application in condition for allowance. Upon the filing of an appeal and entry of the amendment, the status of the claims would be as follows:

**Allowed claim(s): none**

**Rejected claim(s): 1-35**

**Claim(s) objected to: none**

***Response to Arguments***

3. Applicant's arguments filed 5/3/04 have been fully considered but they are not persuasive.

4. In response to applicant's arguments regarding the rejection of claim 1, which was cited in the Office action dated 1/29/04 as being unpatentable over Wan *et al.* (U.S. Patent Number 5,721,572) in view of Liang (U.S. Patent Number 5,786,908), whereby applicant argues on page 16 that Wan and Liang fail to teach of performing a binary search of the forward model look-up table to locate a cell that contains the device independent target color, and interpolating entries from the forward model look-up table at grid points that define the cell located by the binary search of the forward model look-up table so as to obtain device dependent colors corresponding to the device independent target color. First the examiner will discuss the reference of Wan, wherein as read in column 9, lines 10 through 12, Wan states that "the triangle table I must be searched for candidate triangles which may satisfy the enclosure requirements. To facilitate this search a triangle range table (Table III) as illustrated below is created..." Further, as read in column 9, lines 37 through 41, "A unit vector also has associated therewith an angle  $\theta$  as illustrated in Fig. 10. This angle is used to scan the triangle candidates found in the first scan to select triangles ...". Thus, the unit vector has an associated range that is searched, thereby being a binary search, as a unit vector is inherently a binary value. Continuing, as read in column 7, lines 18 through 21, Wan teaches of constructing a gamut boundary using triangles based on a LUT, with the steps of reading in the LUT, splitting the LUT into triangles, and storing the triangles. Therefore, the binary search of the angles to find a triangle, as discussed above, uses

triangles based on a LUT, thereby performing a binary search of the forward model look-up table to locate a cell that contains the device independent target color, as required.

5. Continuing, Wan does teach of interpolating entries from the forward model look-up table at grid points that define the cell so as to obtain device dependent colors corresponding to the device independent target color, as read in column 8, lines 24 through 60, wherein entries that were derived from the LUT are interpolated. However, the examiner notes that Wan fails to expressly disclose (with emphasis added) of interpolating entries from the forward model look-up table at grid points that define the cell **located by the binary search of the forward model look-up table** so as to obtain device dependent colors corresponding to the device independent target color, as the grid points that define the cell of Wan are not specifically located by the binary search.

6. Liang is used to teach of interpolating entries from a forward model look-up table at grid points that define a cell located by a binary search of the forward model look-up table.

Particularly, in column 11, lines 48 through 60, Liang states that "each image pixel color value ... is compared to the values in the primary LUT 12. ...If there is no corresponding value in the primary LUT 12 matching the input color, the receiving means 10determines which is the closest corresponding color value in the primary LUT 12 and provides this information to the interpolator 14 to obtain an interpolated corresponding value in the second color space". Thus, by comparing the input digital data to values in the LUT, Liang is effectively performing a binary search of the forward look-up table, as required. Further, in this same section, Liang is interpolating entries from the forward model look-up table at grid points that define the cell located by the binary search of the forward model look-up table. As read in column 11, line 61

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through column 12, line 10, Liang continues to teach that the above process is performed so as to obtain device dependent colors corresponding to the device independent target color. Because of this, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teachings of Liang in the system of Wan, thereby interpolating the entries from the LUT at grid points that define the cell located by the binary search of the LUT. By modifying Wan's system with Liang's teachings, Wan's system would have a reasonable degree of accuracy of the color values which are converted from a first color space, as recognized by Leung.

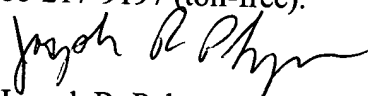
7. Therefore, the rejections of **claim 1**, as well as **claims 8, 15, 22, and 29**, as cited in the Office action dated 1/29/04, under 35 U.S.C. 103(a) as being unpatentable over Wan *et al.* in view of Liang, are maintained.

***Conclusion***


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joseph R. Pokrzywa  
Examiner  
Art Unit 2622

jrj

  
KIMBERLY WILLIAMS  
SUPERVISORY PATENT EXAMINER